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3 March 2005

Ms. Marlene H. Dortch, Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street, S.W. Room TW-A325
Washington DC 20554

Re: ***Ex Parte* Presentation**
In the Matter of New Part 4 of the Commission's Rules
Concerning Disruptions to Communications, ET Docket No. 04-35

Dear Ms. Dortch:

This is to inform you that Kenneth P. Helgeson (Vice president for Network Operations) and Anthony M. Rutkowski (Vice President for Regulatory Affairs) of VeriSign, Inc., met on 2 March 2005 at the Commission's headquarters with Jeffery Goldthorp, Chief of the Office of Engineering and Technology's Network Technology Division ("NTD"), together with John Healy, Shanti Gupta, Whitey Thayer, and Charles J. Iseman (by teleconference).

In this meeting, Mr. Helgeson presented and explained the results of an extensive quantitative measurements based study undertaken by the VeriSign Communications Services operations division 1) showing how the Commission's historical based threshold mechanism for outage reporting for SS7 providers adopted recently in this proceeding can cause very large numbers of false positives (i.e., when there is no actual outage event), and 2) suggesting in the context of the current petitions for reconsideration a need for the Commission to adjust or clarify the related reporting requirements.

The attached slides formed the basis of dialogue, and convey the substance of what was discussed.

Pursuant to the Commission's rules, this *ex parte* letter together with presentation slides are being filed via the Commission's Electronic Comment Filing System for inclusion in the public record of the above-referenced proceedings.

Respectfully submitted,

/s/

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cc:

Jeffery Goldthorp
John Healy
Shanti Gupta
Whitey Thayer
Kent Nilsson
Charles J. Iseman
Kenneth P. Helgeson

Ex Parte Discussion Regarding
Outage Reporting by SS7 Hub Providers
March 2, 2005

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Where it all comes together.

Determining If An Outage Is Reportable

§ 4.9 Outage reporting requirements – threshold criteria

…

(e) *Signaling System 7***.** Signaling System 7 (SS7) providers shall submit electronically a Notification to the Commission within 120 minutes of discovering that they have experienced on any facilities that they own, operate, lease, or otherwise utilize an outage of at least 30 minutes duration that is manifested as the generation of at least 90,000 blocked calls based on real-time traffic data **or at least 30,000 lost calls based on historic carried loads. In cases where a third-party SS7 provider cannot directly estimate the number of blocked calls, the third-party provider shall use 500,000 real-time lost MTP messages as a surrogate for 90,000 real-time blocked calls, or 167,000 lost MTP messages on a historical basis as a surrogate for 30,000 lost calls based on historic carried loads. Historic carried load data or the number of lost MTP messages on a historical basis shall be for the same day(s) of the week and the same time(s) of day as the outage, and for a time interval not older than 90 days preceding the onset of the outage.**

Data Currently Available From SS7 Network

- Data Currently Available From STPs For Each Link
  - STP Name
  - Linkset Name
  - Far End Point Code
  - SLC
  - Date
  - Hour
  - MSU's Transmitted
  - MSU's Received
  - Octets Transmitted
  - Octets Received
  - Link Availability
  - Erlang

VeriSign Traffic Analysis

- Analysis Undertaken to Assess Ability to Comply With Order
  - Collected and Analyzed Historical Traffic Load Data
  - Study Period From 9/1/2004 Through 10/31/2004
  - Three Cross-sections Analyzed
    - Customer Quad
    - LATA Quad
    - Internal Backbone Quad
  - Data collected in one hour increments
  - Data consisted of:
    - MSUs transmitted
    - MSUs received
  - Analysis: For two months, compared the number of MSUs each hour to the number of MSUs for the same hour and same day of the previous week
- Objective: Determine if the available data is adequate to determine lost messages on a historical basis

Quads Analyzed For Study

	Quad #1	Quad #2	Quad #3
Link Type	HSL	LSL	IP
# of Layers	4	12	3
Utilization	10 – 15%	15 – 20%	20 – 25%
% ISUP	92%	58%	95%
Hourly MSUs (All Hours)	19,838,728	5,452,477	13,310,218
Hourly MSUs (6AM – 10PM)	27,320,735	7,559,547	18,170,539
Hourly MSUs (Top 200 Hours)	37,581,232	10,811,460	26,312,479
Equivalent Hourly Calls (Top 200 Hours)	6,914,947	1,254,129	4,999,371

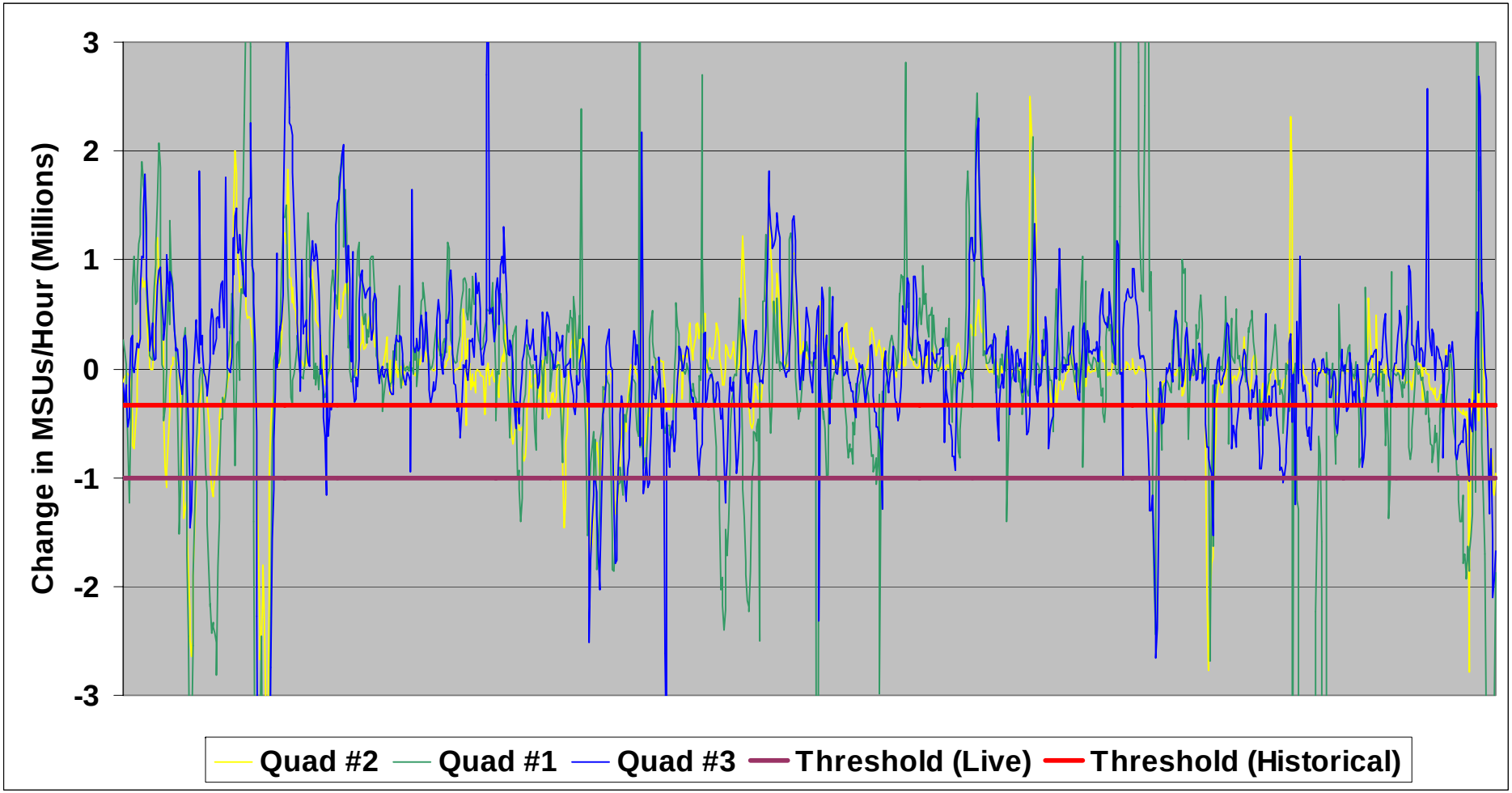
Study Results

	Quad #1	Quad #2	Quad #3
Data Points (Hour to Hour Comparison)	1,296	1,296	1,296
Largest Increase (MSUs)	14,888,854	2,502,757	3,816,933
Largest Decrease (MSUs)	-14,475,249	-3,819,684	-11,787,943
Instances Where Decrease Exceeds Historical Treshold (334,000 MSUs) *	336	181	256
Instances Where Decrease Exceeds Live Threshold (1,000,000 MSUs) **	150	55	72

Increases and decreases were determined by comparing the load carried for a particular hour to the load carried for the same day and same hour the previous week.

- * 773 “Historical” instances occurred in 529 separate hours
- **277 “Live” instances occurred in 252 separate hours

Summary of Analysis



Conclusion and Recommendation

- Due to the volume and variability of SS7 traffic on many cross-sections, it is not possible to determine if a network event resulted in 167,000 lost MTP messages on a historical basis as a surrogate for 30,000 lost calls based on historic carried loads
- Rather than focus on the number of lost calls, it would be more meaningful to the industry to have SS7 hub providers report outages based on the nature of the event such as:
  - A mated pair of STPs out of service for any period of time
  - A single STP out of service for ½ hour or more
  - Connection between two pairs of STPs (entire quad) out of service for any period of time